

ABSTRACT

Exposure is performed with a reticle installed in an exposure apparatus, and a measurement mark on the reticle is transferred onto a wafer so as to form a first transferred image of the measurement mark (step 212). Then, the wafer is rotated (step 218), and then the measurement mark is transferred onto the wafer that has been rotated and a second transferred image of the measurement mark is formed (step 224). In this manner, the first transferred image and the second transferred image of the measurement mark each formed on the wafer are respectively imported by an SEM, according to a direction of the wafer with respect to the reticle during transfer of the measurement mark. Image processing having a common measurement direction is applied to each of the images that are imported without having to rotate the images, and the size of the first transferred image and the second transferred image in the measurement directions is measured. Accordingly, degradation of the size measurement accuracy of the mark due to the combination of image import and image processing can be prevented.